



**ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY CONSTRUCTION PERMIT**

Permit No. 0072-AC002
Rescinds Permit No. 9772-AC009

Date: **March 13, 2000**

**ALYESKA PIPELINE SERVICE COMPANY
TRANS-ALASKA PIPELINE SYSTEM
PUMP STATION SIX**

The Department of Environmental Conservation, under the authority of AS 46.03, AS 46.14, and 18 AAC 50.315, issues an Air Quality Construction Permit to:

Operator: **Alyeska Pipeline Service Company**
 1835 South Bragaw
 Anchorage, AK 99512

Location: Section 19 and 20, T. 12N., R. 10W. Fairbanks Median, Alaska, near the Yukon River Bridge.

The project consists of a facility modification to replace two 354 kW (475 bhp) diesel-electric generators with two 461 kW (619 bhp) diesel-electric generators. The permittee requested limits to avoid classification under 18 AAC 50.300(h)(3) in accordance with 18 AAC 50.305(a)(4).

The Department authorizes the permittee to modify the facility in accordance with the terms and conditions of this permit, and as described in the original permit application and subsequent submittals listed in Exhibit AA. This permit also authorizes the permittee limited operation of the modification as provided by AS 46.14.120.

This construction permit imposes owner-requested limits and revises the permit terms and conditions of Air Quality Control Permit to Operate No. 9572-AA008, as provided for in 18 AAC 50.305(a)(3) and (4), respectively.

John M. Stone, P.E., Manager
Air Permits Program

Date

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A. Permit Continuity 18 AAC 50.340(i)

1. Except as revised or rescinded herein or as superseded by an Air Quality Permit issued under AS 46.14.170, the permittee shall comply with terms and conditions of Air Quality Control Permit to Operate No. 9572-AA008, as amended through December 4, 1998.
2. If permit terms and conditions listed in this permit conflict with those of Permit No. 9572-AA008, Permittee shall comply with terms and conditions listed herein.

B. Standard Permit Conditions

3. The permittee shall comply with each permit term and condition; noncompliance constitutes a violation of AS 46.14, 18 AAC 50, and the Clean Air Act and is grounds for
 - a. An enforcement action;
 - b. Permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280; or
 - c. Denial of an operating permit application.
4. It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.
5. Each permit term or condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of the permit;
6. Compliance with the permit terms and conditions is considered to be compliance with those requirements that are
 - a. Included and specifically identified in the permit; or
 - b. Determined in writing in the permit to be inapplicable.
7. The permit may be modified, reopened, revoked and reissued, or terminated for cause; a request by the permittee for modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
8. The permit does not convey any property rights of any sort, nor any exclusive privilege.

9. The permittee shall allow an officer or employee of the Department, or an inspector authorized by the Department, upon presentation of credentials and at reasonable times, with the consent of the owner or operator, to
 - a. Enter upon the premises where a source subject to the construction permit is located or where records required by the permit are kept;
 - b. Have access to and copy any records required by the permit;
 - c. Inspect any facilities, equipment, practices, or operations regulated by or referenced in the permit; and
 - d. Sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.
10. The permittee shall furnish to the Department, within a reasonable time, any information the Department requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit, or to determine compliance with the permit; upon request, the permittee shall furnish to the Department copies of records required to be kept; the Department, in its discretion, will require the permittee to furnish copies of those records directly to the federal administrator.

C. Standard Record Keeping, Reporting, and Testing Conditions

11. The permittee shall certify all reports, compliance certifications, or other documents submitted to the Department under this permit as required by 18 AAC 50.205.
12. Except as provided for in Conditions 17 and 18, the Permittee shall submit two copies of test plans, reports, certifications, and notices required under Conditions 11, 12, 13, 14, 15, 19, 20, and 22, and Exhibit D of Permit No. 9572-AA008 and this permit to the Department's Air Permits Program , 610 University Avenue, Fairbanks, AK 99709, telephone (907) 451-2139; facsimile (907) 451-2187.
13. The Permittee shall keep records of required monitoring data and support information for at least five years after the date of the collection; support information includes calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by this permit. The Permittee shall keep monitoring and compliance records as required by the Clean Air Act and applicable federal air quality regulations.
14. If requested by the Department, the Permittee shall conduct source tests of unit exhausts and report results as described in 18 AAC 50.220. The Permittee shall comply with all applicable federal requirements, and shall

- a. Use the applicable test methods set out in 40 CFR Part 60, Appendix A, and 40 CFR Part 61, Appendix B, to ascertain compliance with applicable standards and permit requirements;
- b. The Permittee shall conduct source tests of unit exhausts and report the results as described. The Permittee may propose alternative test methods if it can be shown to be of equivalent accuracy, and will ensure compliance with the applicable standards or limits. Alternative test procedures must be approved by the Department prior to the test date.
 - (1). Nitrogen Oxides, NO_x, expressed as NO₂ (ppm, lb/MMBtu, and lbs/hr): Reference Method 7E or Method 20 specified in 40 CFR, Part 60, Appendix A.
 - (2). Oxygen, O₂ (percent): Reference Method 3 or 3A as specified in 40 CFR, Part 60, Appendix A.
 - (3). Stack Velocity and Volumetric Flow Rate: Reference Methods 1-4 as specified in 40 CFR, Part 60, Appendix A.
 - (4). Particulate Matter (grains/dscf, lb/MMBtu, and lb/hr): Reference Method 5 as specified in 40 CFR, Part 60, Appendix A.
 - (5). Sulfur dioxide (SO₂) (ppm, lb/MMBtu, and lbs/hr) Reference Method 6 or 6C as specified in 40 CFR, Part 60, Appendix A.
- c. Submit to the Department, within 60 days after receiving a request, and at least 30 days before the scheduled date of the tests, a complete plan for conducting the source tests;
- d. Give the Department written notice of the tests 10 days before each series; and

Within 45 days after completion of the set of tests, submit the results, to the extent practical, in the format set out in *Source Test Report Outline* in Volume III, Section IV.3, of the State Air Quality Control Plan, adopted by reference in 18 AAC 50.030(8).

15. Conduct visible emissions Surveillance (Percent Opacity) in accordance with procedures set out in Reference Method 9 as specified in 40 CFR, Part 60, Appendix A, effective July 1, 1997. For emission units subject to only visible emission standards set out in 18 AAC 50.050(a) or 50.055(a), the Permittee is not required to reduce observation data as set out in 40 CFR 60 Appendix A, Paragraph 2.5.
16. The Permittee may seek Department approval of alternates to the monitoring, record keeping, and reporting requirements of this permit by submitting a written request to the Department. Until such time as the Department approves an alternative of a monitoring, record keeping, or reporting requirement, the Permittee shall comply with the requirements listed in this permit.

17. Excess emission reporting--Report excess emissions that present a potential threat to human health or safety as soon as possible to the Department's Division of Spill Prevention and Response (SPAR). From 8:00 AM to 4:30 PM, report the event to SPAR by telephone at (907) 451-2121, or by facsimile at (907) 451-2362. Outside of this time, report the event to SPAR by telephone at (800) 478-9300. Please provide a complete description of the event and any assistance required from the Department.
18. Excess emission reporting--In addition to reporting under Condition 16:
 - a. Give written notice of all excess emissions or deviations from permit requirements. Submit the notice as soon as possible and no later than two working days after the event commencement or discovery, to the Department's Air Permits Program, Attention—Excess Emission Report, 555 Cordova Street, Anchorage, AK 99501, by facsimile (907) 269-7508, or by e-mail to: airreports@envircon.state.ak.us. Complete and submit the Excess Emission Report (EER) form provided in Exhibit B, or provide an alternative written notice with complete information for each element listed in the EER form. Except as provided for in Condition 17.b, certify the written notice in accordance with 18 AAC 50.205.
 - b. The Permittee may certify the EER in accordance with 18 AAC 50.205 by attaching to the periodic Facility Operating Report required by Condition G.25 of Permit No. 9572-AA011, a copy of the EER with the certification statement, and signature of the responsible official.
19. Keep a copy of this permit, the State Air Quality Control Regulations 18 AAC 50, and Alaska Statutes 46.14, at the permitted facility.
20. The Permittee shall operate each source in compliance with the applicable emission standards specified by 18 AAC 50.040-.070, by an applicable federal New Source Performance Standard (NSPS), or National Emission Standard for Hazardous Air Pollutants (NESHAP), by limits established as the result of a BACT or LAER determination, or the requested emission limits.

D. Standard Operating Condition

21. The Permittee shall keep and follow a preventative maintenance program for each source listed in Condition 22.a and Condition 23 of this permit, and shall keep a copy of the procedures available at a location within the facility that is readily accessible to operators of the equipment and to authorized representatives of the Department.

E. Limits to Avoid Classification as a Modification under 18 AAC 50.300(h)(3)

22. The Permittee is authorized to install the following fuel burning equipment sources at Pump Station 6:

a.

Model	Description	Year Installed	Rating
4039D	Atlas diesel-electric generator	1997	66 bhp
6063--HK35	Detroit diesel electric generator	2000	619 bhp
6063--HK35	Detroit diesel electric generator	2000	619 bhp

- b. Each 619-bhp replacement Detroit Diesel Generator listed in Condition 21.a shall not be operated until after the replaced diesel electric generator listed in Condition E.20 of permit No. 9772-AC009 is disconnected from the generator set and ceases operation at the facility.
- c. The Permittee must remove the replaced engine from the facility no later than 7 calendar days after the engine ceases operation and it is disconnected from the generator set.
23. The Permittee may replace the fuel burning equipment listed in Condition 22 with other diesel internal combustion (IC) engines subject to Conditions 22.b. and 22.c., provided the cumulative rating of all diesel IC engines at the facility replacing those listed in Condition 22 is no greater than 1304 brake horsepower.
24. The Permittee may operate equipment permitted under Conditions 22 and 23, only during Rampdown Mode, an alternative operating mode during which all three permitted Avon gas generators are indefinitely shut down because TAPS no longer requires the pumping capacity of the facility.
25. To avoid classification as a modification for PM₁₀, CO, SO₂, VOC, and as a PSD major modification for NO_x, during Rampdown Mode, the Permittee shall operate the equipment permitted under Conditions 22 and 23 only when the three Avon gas generators are not operating.
26. Monitoring and Record keeping – Permittee shall record the time-period (dates and duration) over which the diesel engines(s) and the Avon gas generators operate. Permittee shall record the time period(s) during which PS 6 is in Rampdown Mode.
27. Reporting--Permittee shall report compliance with Conditions 24 and 25 as follows:
- a. Attach to the Facility Operating Report required by Permit No. 9572-AA008, the dates of operation of the diesel engines permitted

under Condition 22, the dates of operation of each Avon gas generator, the dates of operation of any replacement generators permitted under Condition 23, and the dates during which the facility is in Rampdown Mode.

F. 18 AAC 50.055: Industrial Processes and Fuel-Burning Equipment

Diesel IC Engine Sources

28. The Permittee shall comply with 18 AAC 50.055(a)(1) and 18 AAC 50.055(b)(1), which state that visible emissions, excluding condensed water vapor, from an industrial process or fuel-burning equipment may not reduce visibility through the exhaust effluent by greater than 20 percent, for a total of more than three minutes in any one hour, and particulate matter emitted from an industrial process or fuel-burning equipment may not exceed, per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours, 0.05 grains.
29. The Permittee shall comply with 18 AAC 50.055, which states that sulfur compound emissions, expressed as sulfur dioxide, may not exceed 500 ppm averaged over a period of three hours. The Permittee shall ensure compliance with this requirement by using only distillate fuel oil with a fuel sulfur content not to exceed 0.24 percent by weight.
30. Monitoring and recording: The Permittee shall:
 - a. During operation, conduct no less than one visible emission surveillance in accordance with Condition 15, on the exhaust stack of each IC engine permitted by Condition 22, or replacement generator permitted under Condition 23 with a rated capacity greater than 300 horsepower no later than 120 days after installation;
 - b. For equipment listed in Condition 22 or replacement equipment permitted by Condition 23, upon Department request, conduct a particulate matter emission test or visible emission surveillance in accordance with Condition 14 or 15, respectively; and
 - c. Obtain a sulfur analysis of each shipment of distillate fuel oil delivered to the facility using the test methods listed in the latest version of ASTM 2880 or ASTM D396; or obtain a vendor certification that each shipment of distillate fuel delivered to the facility does not exceed 0.24 percent sulfur by weight.
31. Reporting--The Permittee shall:
 - a. Submit to the Department visible emission surveillance records within ten days after conducting the surveillance.

- b. List in the Quarterly Facility Operating Report required under Exhibit D of Permit No. 9572-AA008: Sulfur content (in weight percent) of each sample covering one or more distillate fuel oil shipments received. List the name of the supplier of each shipment. Report any change in the type of fuel, test method, or analysis performed. Attach a copy of analyses. If the Permittee elects to document fuel sulfur content by means of vendor certification as set out in Condition 29.c, then attach the vendor certification.

G. Air Pollution Prohibited, 18 AAC 50.110

- 32. The Permittee shall comply with 18 AAC 50.110, which states that no person may permit any emission which is injurious to human health or welfare, animal or plant life, or property, or would unreasonably interfere with the enjoyment of life or property. The Permittee shall:
 - a. Attach to the Facility Operating Report a written description of any public complaint, including the date, time, nature of complaint, and measures taken to resolve the complaint.
 - b. Take reasonable actions to address air pollution complaints resulting from emissions at the facility; and
 - c. Notify the Department in advance of any planned modification or replacement of the fuel burning equipment, which might result in increased potential air contaminant emissions as detailed in Condition B.4 of Permit No. 9572-AA008.

EXHIBIT AA
PERMIT DOCUMENTATION

January 4, 2000	APSC letter responding to Department comments.
December 21, 1999	Department notice of complete application.
October 11, 1999	APSC air quality construction permit application.
December 4, 1998	Air Quality Construction Permit No. 9572-AA008, as amended through December 4, 1998.
March 4, 1996	Air Quality Construction Permit No. 9572-AC008.

Excess Emission Notification Form

Submit to: Facsimile: (907) 269-7508 Telephone: (907) 269-8888

Email: airreports@envircon.state.ak.us

Company Name	Facility Name	Permit Number	
• Event Information (Use 24-hour clock):			
	End Time:	Start Time:	Duration (hr:min):
Date: _____	_____:	_____:	_____:
Date: _____	_____:	_____:	_____:
Total:			_____:

• Cause of Event (Check all that apply):

- | | | |
|------------------------------------|--|--|
| <input type="checkbox"/> START UP | <input type="checkbox"/> UPSET CONDITION | <input type="checkbox"/> CONTROL EQUIPMENT |
| <input type="checkbox"/> SHUT DOWN | <input type="checkbox"/> SCHEDULED MAINTENANCE | <input type="checkbox"/> OTHER _____ |

Provide a detailed description of what happened. Attach additional sheets as necessary.

• Sources Involved:

Identify each Emission Source involved in the event, using the same identification number and name as in the Permit. List any Control Device or Monitoring System affected by the event. Attach additional sheets as necessary.

Source ID No.	Source Name	Description	Control Device
_____	_____	_____	_____
_____	_____	_____	_____

• Emission Standard Exceeded:

Identify each Emission Standard and Permit Condition exceeded during the event. Describe in detail, the extent to which each Standard or Condition was exceeded. List ALL known or suspected injuries or health impacts. Attach additional sheets as necessary.

Standard or Condition	Limit	Exceedance
_____	_____	_____
_____	_____	_____

• Emission Reduction:

Describe in detail, ALL of the measures taken to minimize and/or control emissions during the event. Attach additional sheets as necessary.

• Corrective Actions:

Describe in detail, ALL of the corrective actions taken to restore the system to normal operation. Attach additional sheets as necessary.

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

Printed Name _____	Signature _____	Date _____
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